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RESEARCH ARTICLE

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Predicting psychological factors affecting regular physical activity in hypertensive patients: Application of health action process approach model

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Abstract

Aim: The aim of this study was to determine the factors affecting the behaviour of regular physical activity in patients with hypertension using the health action process approach (HAPA) model.

Design: This cross-sectional study was conducted on 176 hypertension patients, in Astaneh-e-Ashrafiyeh, Guilan, Iran, 2018–2019.

Methods: Data collection tools included demographic characteristics, medical history, the short form of International Physical Activity Questionnaire (IPAQ) and scales related to the HAPA model. The data were analysed using chi-square, independent *t* test, one-way ANOVA, Pearson's correlation coefficient and path analysis on AMOS, version 23.0.

Results: Action self-efficacy ($\beta = 0.59$), outcome expectancy ($\beta = 0.20$) and risk perception ($\beta = 0.18$) had a statistically significant effect on intention. Moreover, the path coefficient between intention ($\beta = 0.35$) and coping self-efficacy ($\beta = 0.29$) with physical activity was statistically significant. The results revealed that HAPA constructs were able to describe 45% of the variance in intention and 31% of the variance in physical activity behaviour.

Conclusion: The HAPA model is a useful framework for describing the factors affecting physical activity in hypertension patients.

KEYWORDS

HAPA Model, hypertension, physical activity, risk perception, self-efficacy

1 | INTRODUCTION

Physical activity is defined as any movement produced by the body's musculoskeletal system, which ultimately leads to increased energy consumption. Despite the frequent use of the word "exercise" instead of physical activity, it should be noted that exercise as a subbranch of physical activity is a set of planned, structured, repetitive and purposeful movements performed with the goal of physical fit in mind (Dasso, 2019). Regular participation in moderate-to-severe physical activity and limiting sedentary lifestyle play a highly important role in reducing health outcomes in children, youth and adults (Carson et al., 2016). According to the World Health Organization (WHO), physical inactivity is the fourth leading cause of death, accounting for 3.2 million deaths annually (WHO, 2009). In return, the